

Clean Air Scientific Advisory Committee

Particulate Matter Review Panel

FY 2004 Member Biosketches

CASAC Particulate Matter Review Panel

Crapo, James

National Jewish Hospital and Medical Research Center

Dr. James Crapo is the Executive Vice President of Academic Affairs; Chairman, Department of Medicine; and Professor of Medicine at the National Jewish Medical and Research Center (NJMRC) in Denver, CO. He is also a Professor of Medicine and the Director of Ph.D. Programs for Graduate Health Care Professionals at the University of Colorado Health Sciences Center. Dr. Crapo received his B.S. in Chemistry from Brigham Young University (1967) and his M.D. from the University of Rochester (1971). Prior to coming to NJMRC in 1996, Dr. Crapo spent over 15 years as the Chief of the Pulmonary and Critical Care Medicine Division at Duke University Medical Center. Throughout his professional career, Dr. Crapo has been active in numerous professional societies, including service on the National Heart, Lung and Blood Institute (NHLBI) Advisory Council and serving as President of the American Thoracic Society. He is also a member of the American Physiological Society, the American Society for Clinical Investigation, the Fleischner Society (where he is also President-elect), the Association of American Physicians, and the Society of Toxicology. In addition, Dr. Crapo is a Fellow of the American College of Chest Physicians, the American College of Physicians, and the Royal College of Physicians, Edinburgh, Scotland. He was a Consultant to the Ozone Review Panel of EPA's Clean Air Scientific Advisory Committee (CASAC) from 1984-1990. Dr. Crapo has maintained a large research program and has numerous Federal-sector grants, primarily with the National Institutes of Health (NIH). In addition, he is the Co-Founder and Director of Antioxidant Research (1994-2003) at Aeolus Pharmaceuticals Inc., a biotech firm directed at the development of soluble, targeted and nitrosylated mimetics of superoxide dismutases to control inflammation-related disease processes. Dr. Crapo also has had a small amount of private-sector laboratory research support. He is the holder of four U.S. Patents, with five other Patents pending, and has in excess of 200 publications.

Hopke, Phil Chair

Clarkson University

Dr. Philip K. Hopke is the Bayard D. Clarkson Distinguished Professor at Clarkson University and the Director of the Center for Air Resources Engineering and Science. In October 1997, he was appointed by the Administrator of the U.S. Environmental Protection Agency (EPA) as a member of the Clean Air Scientific Advisory Committee (CASAC), which is administratively located at EPA under the Science Advisory Board (SAB). Dr. Hopke is presently Chair of the CASAC, and he also chairs both the CASAC Subcommittee on Particle Monitoring and the CASAC National Ambient Air Monitoring Strategy (NAAMS) Subcommittee. In addition, he serves as an SAB Board Member. Professor Hopke is the current President of the American Association for Aerosol Research, and is a member of the National Research Council's Congressionally-mandated Committee on Research Priorities for Airborne Particulate Matter and the Committee on Air Quality Management in the United States. He has previously served on five other NRC committees. Professor Hopke received his B.S. in Chemistry from Trinity College (Hartford) and his M.A. and Ph.D. degrees in chemistry from Princeton University. After a post-doctoral appointment at M.I.T., he spent four years as an assistant professor at the State University College at Fredonia, NY. Dr. Hopke then joined the University of Illinois at Urbana-Champaign, and subsequently came to Clarkson in 1989 as the Robert A. Plane Professor with a principal appointment in the Department of Chemistry. He has served as Dean of the Graduate School, Chair of the Department of Chemistry, and Head of the Division of Chemical and Physical Sciences before he moved his principal appointment to the Department of Chemical Engineering in 2000.

Koenig, Jane Q.

University of Washington

Jane Q. Koenig, PhD, is a Professor of Environmental Health in the School of Public Health and Community Medicine at the University of Washington in Seattle. She received her BS (Psychology, 1959), M.S. (Psychology, 1961) and Ph.D. (Physiological Psychology, 1963) from the University of Washington, Seattle. In addition, Dr. Koenig was a Postdoctoral Fellow (Behavioral Pharmacology) at Stanford University from 1963 to 1965. Dr. Koenig has spent her career studying air pollution health. Her research has involved controlled exposures of human subjects (often subjects with asthma) to common air pollutants; epidemiologic studies of associations between air pollution and emergency department visits for asthma, and studies of the effects of air pollutants in cultured human nasal epithelial cells. Dr. Koenig has published many articles on the health effects of outdoor air pollutants. She also has served on several advisory committees for EPA, the Puget Sound Air Pollution Control Agency, the Mickey Leland Urban Air Toxics Center and other agencies. Dr. Koenig is currently involved in research projects on the health effects of particulate matter especially regarding asthma aggravation. She recently was named the director of an EPA-funded Particulate Matter Health Effects Center sited at the University of Washington.

Koutrakis, Petros

Harvard University

Petros Koutrakis is Professor of Environmental Sciences and director of the Environmental Chemistry Laboratory at Harvard University. He received his Ph.D. in environmental chemistry from the University of Paris. His research interests include human exposure assessment, ambient and indoor air pollution, environmental analytical chemistry, and environmental management. He is Technical Editor-In-Chief of the Journal of the Air and Waste Management Association, consultant to the EPA Science Advisory Board, and an advisor to the International Monitoring of Protected Visual Environments (IMPROVE), Pan American Health Organization (PAHO), World Health Organization (WHO), and the United Nations Environment Program (UNEP). He has served on several EPA review panels and chaired the EPA Review Panel for Research Proposals on Ambient Particle Modeling. He is the PI of the EPA/Harvard Center on particle health effects; Co-PI on two NIEHS Program projects (Cardiac effects of air pollution). In addition, he is the PI of exposure assessment and air quality studies funded by EPA, HEI, EPRI, API, and DOE.

Legge, Allan

Biosphere Solutions

Dr. Allan Legge is currently President of Biosphere Solutions, an environmental consulting firm located in Calgary, Alberta, Canada. Prior to forming Biosphere Solutions in 1993, he was a Senior Research Scientist at the Kananaskis Center for Environmental Research at the University of Calgary from 1972 to 1990, and a Senior Research Officer in the Environmental Research and Engineering Department, Alberta Research Council from 1990 to 1993. Dr. Legge holds a B.A. in Biology and Dramatic Arts which was received from Whitman College, Walla Walla, Washington in 1965, and a Ph.D. in Plant Genetics/Ecology from Oregon State University in Corvallis, Oregon in 1971. His areas of specialization are environmental toxicology/atmospheric chemistry, and he focuses on the evaluation and assessment of the effects of the air pollutants SO₂, O₃, H₂S, NO_x, HF, PM and saline aerosols on forests and agricultural ecosystems. Dr. Legge has been a member of the EPA Science Advisory Board since 1985 and has served on the following: (1) Forest Effects Review Panel (Co-Chair), 1985; (2) Scientific and Technological Achievement Awards Subcommittee (STAA), intermittently from 1986 to 2002; and (3) Clean Air Scientific Advisory Committee (CASAC) as a consultant since 1994 on Review Panels dealing with Nitrogen Oxides, Ozone and Related Photochemical Oxidants, and Particulate Matter. He served as a member of the U.S. National Research Council Committee to Assess the North American Research Strategy on Tropospheric Ozone (NARSTO) from 1997 to 2000. Dr. Legge is an active member of the Air & Waste Management Association (AWMA), the Alberta Society for Professional Biologists, and the International Air Pollution Workshop. He was elected as a Fellow of the American Association for the Advancement of Science (AAAS) in 1992, and a Fellow of the AWMA in 2002. Dr. Legge's primary sources of recent grant and/or contract support have been from resource extraction industries (oil and gas; cement) in Canada, Alberta Environment (provincial government), non-governmental organizations and legal firms.

Lioy, Paul J.

UMDNJ - Robert Wood Johnson Medical School

Dr. Lioy, Professor of Environmental and Community Medicine, UMDNJ-RWJMS, is the Director of the Exposure Measurement and Assessment Division, and he and Dr. P. Georgopoulos are Directors of the Center for Exposure and Risk Modeling. His expertise includes human exposure to environmental and occupational pollution, multi-media exposure issues for metals and pesticides, research on air pollution theory of exposure to dose relationships, and participation in study exposure and/or effects of pollution on human health in urban and non-urban areas, and controlled environments. He has over 180 peer reviewed papers, and has been and is a member of numerous editorial boards. Dr. Lioy is a member of the U.S. EPA Science Advisory Board, the National Research Council Committee on Particles, the Collegium Ramazzini, and International Joint Commission Air Quality Board for U. S. and Canada. He is President of the International Society of Exposure Analysis and was its 1998 recipient of the Wesolowski Award for Human Exposure Research.

Lippmann, Morton

New York University School of Medicine

Dr. Lippmann is a Professor of Environmental Medicine at the New York University (NYU) School of Medicine. He holds a Ph.D. (NYU, 1967) in Environmental Health Science, an S.M. (Harvard University, 1955) in Industrial Hygiene, and a B.Ch.E. (The Cooper Union, 1954) in Chemical Engineering. At NYU, he directs a research program on Human Exposure and Health Effects, and the EPA-supported Particulate Matter Health Effects Research Center. He has been the recipient of numerous awards for his research and contributions in aerosol science and pulmonary physiology, human exposure assessment and dosimetry, chemical transformations in the atmosphere, population studies of exposure-response relationships in occupational and community cohorts, and factors affecting the toxicity of airborne fibers. Much of this research has been focused on specific chemical agents, notably ozone, sulfuric acid, and asbestos. Dr. Lippmann is a past President of the International Society of Exposure Analysis (1994-1995), past Chairman of: the ACGIH (1982-1983); the EPA Science Advisory Board's Executive Committee (2000-2001); EPA's Advisory Committee on Indoor Air Quality and Total Human Exposure (1987-1993); and EPA's Clean Air Scientific Advisory Committee (1983-1987). He has also chaired and been a member of numerous National Research Council committees, including committees on the airliner cabin environment and the health of passengers and crew, synthetic vitreous fibers, measurement and control of respirable dust in mines, indoor pollutants, toxicity data elements, and in-vivo toxicity testing of complex mixtures. His publications include over 275 research and review papers in the scientific literature and two reference texts on environmental health science. He is currently the Director of the EPA-supported Particulate Matter Health Effects Research Center at NYU, and of an EPA-Cooperative Agreement with NYU on personal exposure of respiratory disease patients to particulate matter in ambient air.

Mauderly, Joe

Lovelace Respiratory Research Institute

Dr. Mauderly is Vice President and a Senior Scientist of the Lovelace Respiratory Research Institute, an independent, nonprofit research organization in Albuquerque, New Mexico. He is also Director of the National Environmental Respiratory Center, a program funded by government and industry to understand the health effects of complex mixtures of air contaminants. He is a veterinarian who began his research career as a comparative respiratory physiologist. His research has encompassed interspecies differences in lung function, lung aging, and responses to inhaled toxicants, hazards from a range of occupational and environmental air contaminants ranging from plutonium to diesel emissions, and (more recently) the contributions of individual air pollutants and sources, and their combinations, to the health burden from complex mixtures of air pollutants. He has authored/co-authored over 270 scientific papers, chapters, books, and technical reports. He previously chaired the Clean Air Scientific Advisory Committee of the EPA Science Advisory Board, and continues on the CASAC Particulate Matter Review Panel. He is a member of the National Research Council Committee on Research Priorities for Airborne Particulate Matter. He recently chaired the NRC committee that reviewed the NARSTO Particulate Matter Assessment. He was also a member of the EPA Science Advisory Board committee that reviewed the Agency's latest National Air Toxics Assessment, and chaired an EPA workshop on risk assessment for polycyclic aromatic hydrocarbons. He has held several offices in the Environmental and Occupational Health Assembly of the American Thoracic Society and the Inhalation Specialty Section of the Society of Toxicology. He holds adjunct professorships in Medicine and Pharmacology at the University of New Mexico, serves on the advisory boards of several university research centers, and serves on the editorial board of Experimental Lung Research. Dr. Mauderly's current fiscal year funding consists of two programs. A program on the health hazards of engine emissions is funded by the DOE Freedom Car and Vehicle Technology Program of the U.S. Department of Energy Office of Energy Efficiency and Renewable energy. The National Environmental Respiratory Center is a joint government-industry program on the health impacts of complex mixtures of air pollutants, and is funded by the U.S. Environmental Protection Agency, DOE (two offices), DOT (Federal highway Administration), California Air Resources Board, and several companies and trade associations, including American Chemistry Council, American Petroleum Institute, Hearth, Patio & Barbeque Assn., Japan Automobile Manufacturers Assn., Caterpillar, Cummins, Daimler-Chrysler, Deere, Detroit Diesel, ExxonMobil, Ford, General Motors, International Truck & Engine, Phillips Petroleum, Salt River Project, and Southern Company.

McClellan, Roger O.

Consultant

Dr. Roger O. McClellan received his DVM from Washington State University in 1960 and has more than 4 decades of experience in the fields of inhalation toxicology and risk assessment. He is the author of more than 350 papers and edited 10 books in these fields including the 2 leading texts on inhalation toxicology/respiratory toxicology. He is a Diplomate, by examination, of the American Board of Toxicology and American Board of Respiratory Toxicology and a Fellow of the Academy of Toxicological Sciences and Society for Risk Analysis. He currently is, or has been, an adjunct faculty member at 10 major research universities. Dr. McClellan is an elected member of the Institute of Medicine of the National Academy of Sciences. Dr. McClellan currently works as an Advisor in Inhalation Toxicology and Human Health Risk Analysis from his home office in Albuquerque, NM. He divides his time between pro bono service and work for fee for service clients in government and the private sector. Dr. McClellan has served on numerous NRC Committees including Committee on Toxicology (Chair for 7 years), Committee on Environmental Justice, and the Committee that prepared "Science and Judgment in Risk Assessment." Dr. McClellan has served on numerous EPA Advisory Committees from the founding of EPA to the present under every EPA Administrator including: Chairing Environmental Health Committees and Clean Air Scientific Advisory Committee and the committees that reviewed the Cancer Risk Assessment Guidelines promulgated in 1986 and proposed for promulgation in 2003. He has served on previous CASAC panels reviewing each of the Criteria Pollutants including ozone. Dr. McClellan is currently serving on an Advisory Committee to the CDC Center for Environmental Health Research and on the DOE's Biological and Environmental Research Advisory Committee. Dr. McClellan is a strong proponent of integrating information from multiple sources: epidemiological studies, controlled human exposure investigations, laboratory animal bioassays and mechanistic investigations to assess human health risks. His expertise in inhalation toxicology, inhalation dosimetry modeling, carcinogenesis, comparative medicine, biologically-based dose-response modeling, and quantitative risk assessment are directly relevant to review of the science base for ozone.

Miller, Frederick J.

Chemical Industry Institute of Toxicology

Dr. Fred Miller is currently Vice President for Research at CIIT Centers for Health Research (CIIT). He has been at CIIT since February, 1991. Dr. Miller received a B.A. and M.S. in Statistics from the University of Wyoming. In 1968, he began a career as a commissioned officer in the U.S. Public Health Service (PHS). As a mathematical statistician involved with the design and analysis of studies on the effects of air pollutants on animals, Dr. Miller became interested in the use of such studies for assessing human health risks. He was assigned to the U.S. Environmental Protection Agency (EPA) when it was created in 1970. In 1971, Dr. Miller received an EPA long-term training award, which led to his doctoral research on the transport and removal of ozone in the lungs of animals and man. He received his Ph.D. in Statistics from North Carolina State University in 1977. During his career with EPA, Dr. Miller served as Director of the Health Effects Research Laboratory's Inhalation Toxicology and Environmental Toxicology Divisions. He was the senior author of the paper that established EPA's policy for considering inhalable particles of potential health concern to be those less than 15 μm in aerodynamic diameter as opposed to total suspended particulate matter. Dr. Miller was heavily involved in Agency activities leading to the development of the PM10 primary standards in 1987. Upon retirement from the PHS in 1989, Dr. Miller joined the faculty of Duke University Medical Center, continuing his long-standing interest in extrapolation modeling through his capacity as an Associate Director of the Duke Center for Extrapolation Modeling. Dr. Miller is interested in developing and implementing research strategies and projects that permit increased utilization of animal toxicological results to evaluate the likelihood of human risk from exposure to inhaled chemicals. His primary research interests include pulmonary toxicology, respiratory tract dosimetry of gases and particles, lung physiology and anatomy, extrapolation modeling, and risk assessment. Dr. Miller is internationally recognized for his research on the dosimetry of reactive gases. He is active in professional societies and consulting on environmental health issues. The author or co-author of more than 150 publications, Dr. Miller received a number of Scientific and Technical Achievement awards from EPA and is the recipient of the PHS' Outstanding Service Medal. He served as an ad hoc consultant to the EPA's Science Advisory Board and Clean Air Scientific Advisory Committee (CASAC) prior to being appointed in October 2000 as a CASAC member. Dr. Miller has also been an advisor to various other public organizations and currently chairs the Science Advisory Committee for the National Jewish Medical and Research Center's (Denver, Colorado) Environmental Lung Center. Dr. Miller is currently the Principal Investigator on a contract with Bepak, Europe, LT, for the conduct of respiratory dosimetry research aimed at targeting drug delivery to the respiratory tract via the nose.

Oberdorster, Gunter

University of Rochester

Günter Oberdörster is Professor in the Department of Environmental Medicine and Head of the Division of Respiratory Biology & Toxicology at the University of Rochester and Director of the University of Rochester Ultrafine Particle Center. He is known for his research on the effects and underlying mechanisms of lung injury induced by inhaled non-fibrous and fibrous particles, including extrapolation modeling and risk assessment. His research on with ultrafine particles influenced the field of inhalation toxicology, raising awareness of their unique toxicological potential. He has extensive expertise in the toxicology and health effects of air pollutants, their risk assessment and toxicokinetics. Dr. Oberdörster earned his D.V.M. and Ph.D. (Pharmacology) from the University of Giessen in Germany. He has served on national and international committees, among others NIEHS study sections, EPA's Science Advisory Board committees, Board of Scientific Counselors of the National Toxicology Program, NRC's Committee on Toxicology, TLV Committee of the American Conference of Governmental Industrial Hygienists, several working groups of IARC, WHO consultancies, IUPAC Commission on Toxicology, ad hoc Expert Group on Chemicals Bureau of the European Commission, and advisory panel of the German Research Association. He continues to serve on EPA's CASAC and on NRC's Committee on Research Priorities for Airborne Particulate Matter. Sources of his present grant support include EPA, NIEHS and International Carbon Black Association.(CASAC- Clean Air Scientific Advisory Committee; EPA - Environmental Protection Agency; IARC - Intl. Agency for Research on Cancer; NRC - Natl. Research Council; TLV - Threshold Limit Value; WHO - World Health Organization)

Poirot, Richard L.

Vermont Agency of Natural Resources

Mr. Richard L. Poirot has worked as an environmental analyst in the Air Quality Planning section of the Vermont Department of Environmental Conservation since 1978. His responsibilities include developing the technical support for State Implementation Plans (SIPs) to ensure attainment and maintenance of Federal and State standards for ozone, particulate matter, and regional haze. Given the rural nature and northeasterly location of Vermont, the influence of regional-scale pollution transport is of particular interest. Lacking sophisticated atmospheric chemistry modeling expertise and resources, Mr. Poirot has also developed interests in drawing inference on the nature of pollution sources from analysis of ambient measurement data, and in working in collaborative regional scientific of science/policy forums. For example, he is or has been a participant on Ambient Monitoring and Assessment Committee for the Northeast States for Coordinated Air Use Management, the Data Analysis workgroup for the Ozone Transport Assessment Group, the Science and Technical Support Workgroup for the FACA Subcommittee on Ozone, Particulate Matter and Regional Haze, the Monitoring and Data Analysis Workgroup for the Mid Atlantic/Northeast Visibility Union (MANE-VU), the EPA PM-2.5 Data Analysis workgroup, the Steering Committee for the Interagency Monitoring of Protected Visual Environments, and the US/Canada (Air Quality Agreement) Subcommittee on Scientific Cooperation. Mr. Poirot holds a B.A. degree from Dartmouth College, where he majored in geography and environmental studies. In November 2001, he was appointed by the Administrator of the U.S. Environmental Protection Agency (EPA) as a member of the Clean Air Scientific Advisory Committee (CASAC) of EPA's Science Advisory Board.

Rowe, Robert D.

Stratus Consulting, Inc.

Robert D. Rowe is an economist with, and President of, Stratus Consulting, Inc. He holds a Ph.D. in Economics from Texas A&M University (1975), and previously served as faculty member at the University of Wyoming. He has served on the Board of Directors of the Association of Environmental and Resource Economists, and has 15 years services as a consultant member of EPA Science Advisory Board committees dealing with air pollution standards and benefit-cost analyses. For 25 years he has conducted research on the human health and welfare impacts of air pollution and the economic valuation of these impacts, the benefits and costs of alternative regulatory strategies on the national and state levels, and on the air pollution externalities from electricity production and from transportation. In addition, Dr. Rowe has served as a lead expert for multiple Natural Resource Damage Assessment (NRDA), generally for public trustees and conducted numerous recreation economic assessments. His current work includes primary research on the valuation of mortality risk reduction for the U.S. EPA and Health Canada, valuation of protection for endangered Steller Sea Lions for the NMFS, cost-of-illness valuation for Health Canada, and ongoing NRDAs.

Samet, Jonathan M.

Johns Hopkins University

Jonathan M. Samet, M.D., M.S. is Professor and Chairman of the Department of Epidemiology of the Johns Hopkins Bloomberg School of Public Health. Dr. Samet received a Bachelor's degree in Chemistry and Physics from Harvard College, an M.D. degree from the University of Rochester School of Medicine and Dentistry, and a Master of Science in epidemiology from the Harvard School of Public Health. He is trained as a clinician in the specialty of internal medicine and in the subspecialty of pulmonary diseases. From 1978 through 1994, he was a member of the Department of Medicine at the University of New Mexico School of Medicine where most recently he was Professor and Chief of the Pulmonary and Critical Care Division in the Department of Medicine. At Johns Hopkins, he chairs the Department of Epidemiology and is Director of the Institute for Global Tobacco Control and Co-Director of the Risk Sciences and Public Policy Institute. His research has addressed the effects of inhaled pollutants in the general environment and in the workplace. Dr. Samet has written widely on the health effects of active and passive smoking and served as Consultant Editor and Senior Editor for Reports of the Surgeon General on Smoking and Health, including the 1985, 1986 and 1990 reports, receiving the Surgeon General's Medallion in 1990 for these contributions. He is Senior Scientific Editor for the next two reports, one on active smoking and the other on passive smoking. He was Chair of the 2002 Working Group for The International Agency for Research on Cancer (IARC) that prepared new monographs on active and passive smoking. He also edited and contributed to the monographs of the National Cancer Institute on Smoking and Tobacco Control. He has served on the Science Advisory Board for the U.S. Environmental Protection Agency and was Chairman of the Biological Effects of Ionizing Radiation Committee VI of the National Research Council. For the National Research Council, he is presently Chairman of the Committee on Research Priorities for Airborne Particulate Matter and of the Board on Environmental Studies and Toxicology. He has been President of the Society for Epidemiologic Research and of the American College of Epidemiology. He is a past Editor of the American Journal of Epidemiology and is currently Editor of Epidemiology. He was elected to the Institute of Medicine of the National Academy of Sciences in 1997.

Speizer, Frank

Harvard Medical School

Dr. Frank E. Speizer is currently Edward H. Kass Professor of Medicine at the Channing Laboratory of the Harvard Medical School, Boston, MA. Since 1988, he has also served as Co-Director of the Channing Laboratory. Dr. Speizer also holds hospital appointments as a senior physician in the Department of Medicine at Brigham and Women's Hospital, Boston; MA and as senior physician in the Department of Medicine at Beth Israel Deaconess Medical Center, Boston. Dr. Speizer received his Bachelor of Arts (A.B.) degree from Stanford University in 1957, and his Doctor of Medicine (M.D.) from the Stanford University Medical School in 1960. He also holds an honorary Master of Arts (A.M.) degree from Harvard University, which was awarded in 1989. Prior to his current appointment at the Channing Laboratory, Dr. Speizer served as Associate Professor of Epidemiology (Physiology) at the Harvard School of Public Health, Boston (1978-1986), and as Associate Professor of Medicine, Harvard Medical School (1978-1986). Since 1986, he has served as both Professor of Medicine at the Harvard Medical School and as Professor of Environmental Sciences at the Harvard School of Public Health. Dr. Speizer's major committee assignments include serving as: Executive Committee, Dana Farber/Harvard Cancer Center, Boston (1998); Co-Chair, American Thoracic Society Questionnaire Revision Committee (1999); Member, Honors Committee, Harvard Medical School (2002); and Chair, Search Committee for Pulmonary Division Chief, Brigham and Women's Hospital. In October 2001, Dr. Speizer was appointed by the Administrator of the U.S. Environmental Protection Agency (EPA) as a member of the Clean Air Scientific Advisory Committee (CASAC) of EPA's Science Advisory Board. His major professional society involvement includes serving as a Member of the International Society for Infectious Diseases and the American Thoracic Society, National Asthma Research Committee; and as Associate Editor for Environmental Research. Dr. Speizer's awards and honors include: Honorary Fellow, American College of Epidemiology (2000); World Lung Health Award, American Thoracic Society (2000); Member, Institute of Medicine, National Academy of Sciences (2001); Excellence in Women's Health Award, Jacobs Institute of Women's Health (2001); the Charles S. Mott Prize, General Motors Fund for Cancer Research (2001); and the Excellence in Women's Health Award, Brigham and Women's Hospital (2001). An epidemiologist, Dr. Speizer's major research interests are environmentally- and occupationally-related acute and chronic diseases; the natural history of chronic obstructive lung disease; and epidemiologic studies of risk factors for cancer, heart disease and diabetes. He is extensively published in his disciplinary field of expertise.

Vedal, Sverre

National Jewish Medical and Research Center

Dr. Sverre Vedal is currently Professor of Medicine in the Division of Environmental and Occupational Health at the National Jewish Medical and Research Center in Denver, Colorado; and Professor in the Department of Preventive Medicine and Biometrics and in the Division of Pulmonary Sciences and Critical Care Medicine at the University of Colorado School of Medicine. National Jewish is a non-sectarian, not-for-profit, independent, clinical and research medical center that specializes in respiratory, immunologic, allergic, and infectious diseases. Dr. Vedal is a respiratory physician and an epidemiologist. He received his Doctor of Medicine degree from the University of Colorado and his Master of Science (M.Sc.) degree in epidemiology from the Harvard University School of Public Health. Dr. Vedal serves as a standing member of the Review Committee of the Health Effects Institute (HEI). Additionally, he was a member of the HEI expert panel of the HEI-funded reanalysis of the Six Cities and American Cancer Society air pollution cohort studies, a member of the review committees for the HEI-funded National Morbidity, Mortality, and Air Pollution Study (NMMAPS) I and II, and now chairs the NMMAPS review committee and the HEI committee reviewing the revised analysis of EPA-selected studies. Dr. Vedal also serves as a member of the Air Quality Management in the U.S. Committee of the National Research Council. In January 1998, he was appointed by the Administrator of the U.S. Environmental Protection Agency (EPA) as a member of the Clean Air Scientific Advisory Committee (CASAC) of EPA's Science Advisory Board. Dr. Vedal's research is largely in the area of air pollution health effects. He has completed studies on effects of air pollution in panels of asthmatic children, children without asthma, patients with COPD, and patients at high risk of cardiac arrhythmias, as well as time-series studies of mortality, hospitalization and emergency room visits. Dr. Vedal is currently working on incorporating source-oriented approaches to specifying exposure to ambient air pollution in epidemiological studies, and on identifying effects of chronic exposure to air pollution.

White, Ronald

Johns Hopkins University

Ronald H. White, M.S.T. Johns Hopkins University Bloomberg School of Public Health Baltimore, Maryland. Ronald H. White is Associate Research Scientist in the Department of Epidemiology at the Johns Hopkins University Bloomberg School of Public Health in Baltimore, Maryland, where he serves as Deputy Director of the Risk Sciences and Public Policy Institute. He previously served as Assistant Executive Director, Education, Research, and Community Affairs at the National Osteoporosis Foundation and as Assistant Vice President, National Policy at the American Lung Association. He earned his Master of Science in environmental studies from Antioch University, and his Bachelor of Science in environmental science from Clark University. Prior to joining the American Lung Association, he was senior transportation/air quality planner and then public participation coordinator for air quality planning at the Tri-State Regional Planning Commission in New York. Mr. White currently serves as a member of the National Research Council Committee on Research Priorities for Airborne Particulate Matter, the External Science Advisory Committee for the National Environmental Respiratory Center, and as a consultant to the EPA Clean Air Scientific Advisory Committee for the Particulate Matter NAAQS review. He has served as a member of the Integrated Human Exposure Committee of the EPA Science Advisory Board, as well as on the EPA Blue Ribbon Panel to review the use of oxygenates in gasoline. He has no recent or current direct grant or contract support from EPA or other federal funds.

White, Warren H.

University of California - Davis

Warren H. White retired from Washington University (WU) in 2002, and since November have been a Visiting Professor at the University of California at Davis (UCD). I am supported in the Crocker Nuclear Laboratory through a contract between the National Park Service and the University for management of the Inter-Agency Monitoring of Protected Visual Environments (IMPROVE) program. I expect to continue my participation as co-PI in the EPA-funded St. Louis – Midwest Particulate Matter Supersite, through a subcontract from WU to UCD, but arrangements for this have yet to be formalized between WU and UCD. I have open, but currently dormant, consulting arrangements for data analysis with EPRI (formerly the Electric Power Research Institute, Palo Alto, CA) and HEI (Health Effects Institute, Cambridge, MA). My current research focuses on (a) characterizing the precision, accuracy, and multi-year stability of PM data from the national trend monitoring networks IMPROVE and CASTnet, and (b) developing and applying interpretive tools that better exploit the greatly improved (hourly or better) time resolution becoming available with new monitoring methods such as those being assessed in the supersite program. Both efforts reflect my long-standing interests in finding novel ways to extract useful information from routine data streams and, simultaneously, in understanding how the small errors that are inherent in all measurements can have unexpectedly large impacts on our interpretations of them. I view my involvement in the Supersite and IMPROVE programs as the culminations of 30+ years spent largely at the messy interface of measurement and interpretation, mediating between the experiment and the mathematical model. My advanced degrees are in mathematics: M.S. (1964) and Ph.D. (1967) from the University of Wisconsin (Madison). I am a member of the American Mathematical Society (AMS) and the Air & Waste Management Association (AWMA). In AWMA, I have chaired the St. Louis regional Section, the Visibility Committee, and the Publications Committee. I have served on various Science Advisory Board (SAB) and National Research Council (NRC) committees; I am currently on the PM NAAQS Review Panel and PM Monitoring Subcommittee of the SAB, and the Committee on Research Priorities for Airborne Particulate Matter for the NRC. I also performed the audits of the original air quality data for the recent HEI Reanalysis of the Harvard Six Cities Study and the ACS Study of Particulate Air Pollution and Mortality.

Wolff, George

General Motors Corporation

Dr. George Wolff is presently a Principal Scientist with the General Motors Public Policy Center. He holds a B.S. in Chemical Engineering from the New Jersey Institute of Technology (1969), an M.S. in Meteorology and Air Resources Management from New York University (1970), and a Ph.D. in Environmental Sciences (Water, Air and Waste Management) from Rutgers University (1974). Dr. Wolff was an Adjunct Professor, Department of Civil and Environmental Engineering, Michigan State University, from 1998 to 2000 and at the University of Michigan, School of Public Health, from 1991 to 1995. Dr. Wolff has previously served as both a Member and Chair (1992-1996) of EPA's Clean Air Scientific Advisory Committee (CASAC), including the period during the CASAC conducted its previous iteration of National Ambient Air Quality Standard (NAAQS) reviews of ozone (1993-1996) and particulate matter (1994-1996). Dr. Wolff presently serves as a Consultant to the CASAC Particulate Matter Review Panel, and he has also served on numerous other CASAC panels and SAB committees, including the Research Strategies Advisory Committee (RSAC) (1992-1994), the Advisory Council on Clean Air Compliance Analysis (1995-1998), the Air Quality Modeling Subcommittee (1997-1998), and the Health and Ecological Effects Committee (1997-1998). Dr. Wolff is a fellow member of the Air & Waste Management Association and a member of the American Meteorological Society and the American Association of the Advancement of Science (AAAS). Dr. Wolff's other professional advisory activities and associations include: National Research Council (NRC), Committee to Review the U.S. Department of Energy (DOE), Office of Fossil Energy, Research Plan for Fine Particulates (1999-2000); Health Effects Institute (HEI), Advisory Board for the Epidemiology Reanalysis Project (1998-2001); University of Michigan, School of Public Health, External Advisory Committee for the Michigan Center for the Environment and Children's Health (1998-present); reviewer for various EPA, EPRI and HEI research programs (1979-present); California Air Resources Board (CARB) Management Advisory Group for the Southern California Air Quality Study (SCAQMS) and CARB Emissions Working Group for the Southern California Air Quality Study (1985-1991); CARB Statewide Modeling Coordination Group (1989-1991); Michigan Department of Natural Resources' Southeast Michigan Ozone Modeling Committee, (1989-1990); Lake Michigan Ozone Study (LMOS) Advisory Committee (1990-present); and the Southeast Michigan Ozone Study (SEMOS) Management Committee (1992-present).

Zielinska, Barbara

University of California - Davis

Dr. Barbara Zielinska currently holds the position as Research Professor and Director of the Organic Analytical Laboratory at the Division of Atmospheric Sciences of the Desert Research Institute (DRI) in Reno, Nevada. The DRI is an autonomous research division of the University and Community College System of Nevada (UCCSN). DRI was created in 1959 by a special act of the Nevada State Legislature. Under the act and subsequent actions of the University Board of Regents, DRI is charged with conducting basic and applied research in environmental science. The institute employs more than 400 professional, technical, and support staff. Dr. Zielinska has been active in the air pollution field for more than 20 years and specializes in the analysis of organic compounds in ambient air and in emission sources. Her list of publications includes over 80 papers concerning the analysis of ambient and source samples for polycyclic organic hydrocarbons (PAH), nitro-PAH and other toxic air pollutants. She is currently the principal investigator of the following grants and contracts: Section 211(b) tier 2 high-end exposure screening study of baseline and oxygenated gasoline (funded by the American Petroleum Institute); chemical characterization of the exhaust from heavy-duty diesel vehicles to evaluate the performance of diesel technology options, including fuel and catalyst (funded by DOE/NREL, SCAQMD and BP/ARCO); chemical characterization of heavy-duty vehicles, tested on chassis dynamometer (Coordinating Research Council); and the characterization of chemical composition and ambient concentrations of particulate and semi-volatile organic compounds for the California Regional PM_{2.5}/PM₁₀ Air Quality Study (CRPAQS). Dr. Zielinska's recently completed research projects include: detailed chemical characterization of diesel and gasoline exhaust for the DOE/NREL comparative toxicity study; apportionment of diesel emissions in underground mines where heavy-duty diesel equipment is used and assessment of miner's exposures to these emissions (funded by the Health Effects Institute); chemical analyses of collected diesel particulate matter samples in the CRC E-43 project (DOE/NREL); and analysis of speciated volatile organic compounds for the 2000 Central California Ozone Study and 1997 Southern California Ozone Study-NARSTO (CARB). Dr. Zielinska received her M.Sc. degree from the Lodz University of Technology, Poland, and her Ph.D. degree from the Polish Academy of Sciences, both in Chemistry. In May 2001, she was appointed by the Administrator of the U.S. Environmental Protection Agency (EPA) as a member of the Clean Air Scientific Advisory Committee (CASAC) of EPA's Science Advisory Board. for the recent HEI Reanalysis of the Harvard Six Cities Study and the ACS Study of Particulate Air Pollution and Mortality.